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IN THE SPECIFICATION

Please replace the paragraph on page 5, lines 11-21 of the present application with the following:

wherein: C is a moiety on the surface of the substrate; L is a linker group capable of bonding to at least one C moiety; q, r and t are independently 0 or 1, provided the sum of q + r + t is at least 1; Y is a residue capable of initiating free radical polymerization upon ~~UV initiated~~ homolytic cleavage of the Y-S bond; S is sulfur; and, G is a nitrogen or an oxygen heteroatom. Additionally, the intermediate portion of each polymer chain has a weight average molecular weight of at least about 1000, is substantially free of crosslinks to an intermediate portion of another polymer chain, contains repeat units derived from an acrylamide-based monomer and at least one other monomer, and contains functionalized sites which have been formed in their active state (reacting directly with the probe molecules, as further described herein).

Please also replace the paragraph on page 6, lines 9-21 of the present application with the following:

wherein: C is a moiety on the surface of the substrate; L is a linker group capable of bonding to at least one C moiety; q, r and t are independently 0 or 1, provided the sum of q + r + t is at least 1; Y is a residue capable of initiating free radical polymerization upon ~~UV initiated~~ homolytic cleavage of the Y-S bond; S is sulfur; and, G is a nitrogen or an oxygen heteroatom. The derivatized surface is then contacted with a composition comprising a water-soluble or water-dispersible free radically polymerizable monomer mixture, the mixture containing an acrylamide-based monomer and at least 1 other monomer, under reaction conditions to form bound polymer chains comprising a water-dispersible segment having a weight average molecular weight of at least about 1000 and one or more active functionalized sites thereon, the active site(s) reacting directly with a probe selective for the biological molecule. Unbound polymer is separated and then a probe is bonded to the bound polymer chains through the active functionalized sites.